

February 2006

# Type SR8 Sanitary Backpressure Regulator



Figure 1. Type SR8

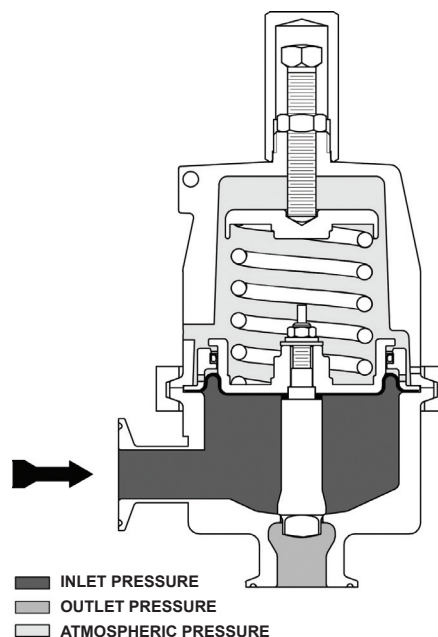


Figure 2. Operational Schematic

## Introduction

Type SR8 self contained backpressure regulators are suitable for pressure control of steam, liquid, or gaseous service. Typical set points range from 2 to 125 psi (0,2 to 8,6 bar). The regulator is designed to meet sanitary application and material requirements.

## Scope of the Manual

This manual provides installation, startup, maintenance, and parts ordering information for the Type SR8 Sanitary Backpressure Regulator.

## Principle of Operation

Pressure in the controlled system (regulator inlet pressure) registers beneath the diaphragm of the regulator and opposes the force provided by the predetermined spring compression. When regulator spring force exceeds diaphragm force exerted by the inlet pressure, the spring will keep the valve plug closed to prevent flow to the downstream system. As inlet pressure increases above setpoint, this increase registers on the diaphragm and the valve plug opens to allow flow to the downstream system.

Patents Pending



[www.emersonprocess.com/regulators](http://www.emersonprocess.com/regulators)



# Type SR8

## Specifications

### Body Size, Inlet and Outlet Connection Style

1/2, 3/4, 1, 1-1/2, 2, and 3  
(DN 15, 20, 25, 40, 50 and 80)

### End Connection<sup>(4)</sup>

Tri-Clamp ® Sanitary connections

### Body Pressure/Temperature Ratings<sup>(1)</sup>

MAXIMUM TEMPERATURE, °F (°C)	MAXIMUM INLET PRESSURE, PSIG (bar)	MAXIMUM OUTLET PRESSURE, PSIG (bar)
150 (65)	210 (14,5)	210 (14,5)
275 (135)	180 (12,4)	180 (12,4)
400 (204)	160 (11)	160 (11)

### Maximum Operating Pressures<sup>(1, 3)</sup>

See Table 1

### Set Pressure Ranges

See Table 2

### Maximum Differential Pressures<sup>(1)</sup>

See Table 3

### Regulator Temperature Capabilities<sup>(1)</sup>

See Table 4

### Pressure Registration

Internal

### Service Media

Steam, Gas, and Liquid

### Options

Vacuum protection  
Pressure loaded spring case  
T-handle adjusting screw

### Pressure Loaded Spring Case Option

#### Maximum Loading Pressure

1/2 through 1-1/2-inch (DN 15 through 40) body:

125 psig (8,62 bar)

2 and 3-inch (DN 50 and 80) body:

60 psig (4,14 bar)

1/4-inch NPT tapped vent connection

### Vacuum Protection Option

#### Maximum Vacuum Pressure

14 psig (0,96 bar) (vacuum)

### Certifications Available upon Request

3A certificate

FDA approved elastomers/plastics

Material and Functional Test Certificates

USP Class VI approved elastomers/plastics<sup>(2)</sup>

1. The pressure/temperature limits in this manual and any applicable standard or code limitation should not be exceeded.
2. Contact your Fisher Sales Representative for details on available constructions.
3. Maximum pressure to prevent damage to internal parts and leakage to atmosphere.
4. End connection clamps and gaskets to be supplied by the user.

**Table 1. Maximum Operating Pressures**

BODY SIZE, INCHES (DN)	MAXIMUM TEMPERATURE, °F (°C)	MAXIMUM INLET PRESSURE, PSIG (bar)	MAXIMUM OUTLET PRESSURE, PSIG (bar)
1/2, 3/4, 1, 1-1/2 (15, 20, 25, 40)	150 (65)	210 (14,5)	210 (14,5)
	275 (135)	180 (12,4)	180 (12,4)
	400 (204)	160 (11)	160 (11)
2 and 3 (50 and 80)	150 (65)	150 (10,3)	150 (10,3)
	275 (135)	125 (8,62)	125 (8,62)
	400 (204)	110 (7,58)	110 (7,58)

**Table 2. Set Pressure Ranges and Control Spring Data**

BODY SIZE, INCHES (DN)	SET PRESSURE RANGES, PSIG (bar)	COLOR	WIRE DIAMETER, INCH (mm)	FREE LENGTH, INCH (mm)	PART NUMBER
1/2, 3/4 (15, 20)	2 to 8 (0,2 to 0,5) <sup>(1)</sup>	Blue	0.138 (3,51)	2.75 (69,9)	GE06780X012
	5 to 25 (0,4 to 1,7)	Silver	0.177 (4,50)	2.75 (69,9)	GE06781X012
	10 to 50 (0,7 to 3,4)	Green	0.192 (4,88)	2.75 (69,9)	GE06782X012
	35 to 100 (2,4 to 6,9)	Red	0.225 (5,72)	2.75 (69,9)	GE06783X012
	75 to 125 (5,2 to 8,6)	Red/ Yellow	0.225 (5,72)/ 0.148 (3,76)	2.75 (69,9)/ 2.75 (69,9)	GE06783X012/ GE06784X012
1, 1-1/2 (25, 40) full port 1-1/2 x 1 (40 x 25)	2 to 8 (0,2 to 0,5) <sup>(1)</sup>	Blue	0.225 (5,72)	3.25 (82,6)	GE02763X012
	5 to 25 (0,4 to 1,7)	Silver	0.282 (7,16)	3.25 (82,6)	GE02764X012
	15 to 70 (1,0 to 4,8)	Green	0.331 (8,41)	3.25 (82,6)	GE02765X012
	25 to 90 (1,7 to 6,2)	Red	0.362 (9,19)	3.25 (82,6)	GE02766X012
	35 to 100 (2,4 to 6,9)	Green Yellow	0.331 (8,41) 0.250 (6,35)	3.25 (82,6) 3.25 (82,6)	GE02765X012 GE06090X012
	75 to 125 (5,2 to 8,6)	Red/ Yellow	0.362 (9,19)/ 0.250 (6,35)	3.25 (82,6)/ 3.25 (82,6)	GE02766X012/ GE06090X012
2 and 3 (50 and 80)	10 to 25 (0,7 to 1,7)	Silver	0.562 (14,3)	6.00 (152,4)	GE14003X012
	15 to 50 (1,0 to 3,4)	Green	0.625 (15,9)	6.00 (152,4)	GE14004X012
	25 to 60 (1,7 to 4,1)	Red	0.625 (15,9)	6.00 (152,4)	GE14005X012

1. The 2 to 8 psig (0,14 to 0,55 bar) spring is not available with the metal diaphragm.

**Table 3. Maximum Differential Pressures**

BODY SIZE, INCHES (DN)	OUTLET PRESSURE RANGES, PSIG (bar)	COLOR	MAXIMUM DIFFERENTIAL PRESSURE, PSID (bar d)
1/2, 3/4 (15, 20)	2 to 8 (0,2 to 0,5)	Blue	15 (1,0)
	5 to 25 (0,4 to 1,7)	Silver	40 (2,7)
	10 to 50 (0,7 to 3,4)	Green	100 (6,9)
	35 to 100 (2,4 to 6,9)	Red	140 (9,6)
	75 to 125 (5,2 to 8,6)	Red/Yellow	160 (11)
1, 1-1/2 (25, 40) full port 1-1/2 x 1 (40 x 25)	2 to 8 (0,2 to 0,5)	Blue	15 (1,0)
	5 to 25 (0,4 to 1,7)	Silver	40 (2,7)
	15 to 70 (1,0 to 4,8)	Green	100 (6,9)
	25 to 90 (1,7 to 6,2)	Red	125 (8,6)
	35 to 100 (2,4 to 6,9)	Green/Yellow	140 (9,6)
	75 to 125 (5,2 to 8,6)	Red/Yellow	160 (11)
2 and 3 (50 and 80)	10 to 25 (0,7 to 1,7)	Silver	50 (3,4)
	15 to 50 (1,0 to 3,4)	Green	75 (5,2)
	25 to 60 (1,7 to 4,1)	Red	75 (5,2)

**Table 4. Temperature Capabilities**

SEAT TYPE	DIAPHRAGM MATERIAL	O-RING MATERIAL	TEMPERATURE RANGE, °F (°C)
Metal (316L)	EPDM	EPDM	- 20 to 275 (-28 to 135)
	316L SST	PTFE/FKM <sup>(1)</sup>	+20 to 400 (-6 to 204)
	PTFE/FKM	PTFE/FKM	+20 to 400 (-6 to 204)
Soft (PTFE/316L)	EPDM	EPDM	- 20 to 150 (-28 to 65)
	316L SST	PTFE/FKM <sup>(1)</sup>	+20 to 150 (-6 to 65)
	PTFE/FKM	PTFE/FKM	+20 to 150 (-6 to 65)
Soft (PEEK/316L)	EPDM	EPDM	-20 to 275 (-28 to 135)
	316L SST	PTFE/FKM <sup>(1)</sup>	+20 to 400 (-6 to 204)
	PTFE/FKM	PTFE/FKM	+20 to 400 (-6 to 204)

1. O-ring material is PTFE for the 1/2 and 3/4 inch (DN 15 and 20) sizes. Temperature range is the same.

# Type SR8

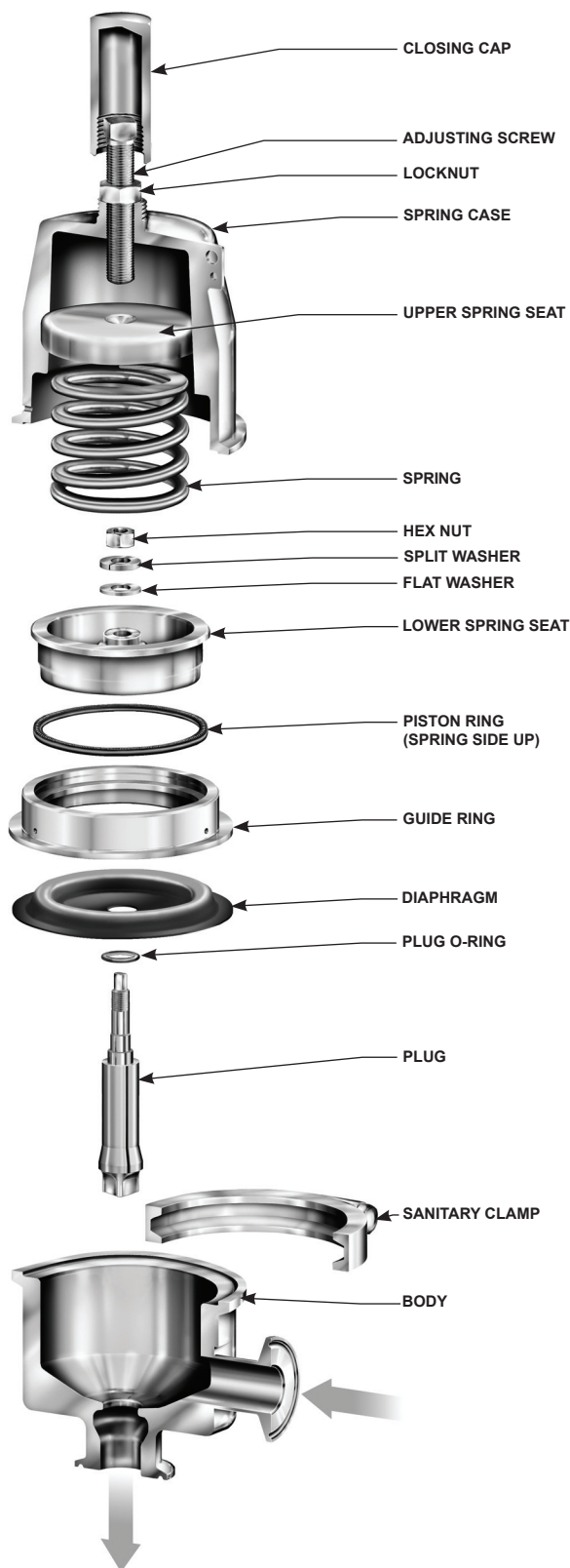


Figure 3. Type SR8 Exploded View



## WARNING

Regulators should be installed, operated, and maintained in accordance with federal, state, and local codes, rules and regulations, and Fisher instructions.

If a leak develops in the system, it indicates service is required. Failure to take the regulator out of service immediately may create a hazardous condition.

## Installation

Clean out all pipelines before installation of the regulator and check to be sure the regulator has not been damaged or collected foreign material during shipping. The regulator may be installed in any position desired. However, to ensure self-draining (from inlet to outlet) the regulator should be installed with the spring case in the upright vertical position. The arrow on the body indicates flow direction.

The piping flange to regulator end connection flange clamps and gaskets are supplied by the user. Clamp gaskets must be compatible with the system requirements. Install and tighten clamps to manufacturer's specifications.

### Note

It is important that the regulator be installed so that the vent hole in the spring case is unobstructed at all times.

## Pressure Loaded Construction

The spring case can be pressure loaded to adjust set pressure. An optional tapped spring case, guide ring seal, and sealing washer on the adjusting screw must be used for these applications. The loading pressure is connected to the 1/4-inch NPT connection in the spring case allowing registration on the spring side of the diaphragm. Adjusting loading pressure will proportionally change the pressure setting of the regulator. A small amount of mechanical spring load, in addition to the pressure load, is recommended. Regulator set pressure achieved from the combination of spring load and pressure load should not exceed the set pressure ranges listed in Table 2.

**WARNING**

Over pressuring any portion of this equipment may result in equipment damage, leaks in the valve, or personal injury due to bursting of pressure-containing parts. The system should be inspected after any overpressure condition.

## Startup

The regulator is factory set to the midpoint of the spring range. Please refer to the Adjustment section for directions on changing the setpoint. With proper installation completed, slowly open the upstream and downstream shutoff valves.

### Note

**When the pressure load option is used, always open block valves on main line before applying loading pressure to the spring case to avoid diaphragm damage.**

## Adjustment

The setting of the regulator can be varied within the pressure range stamped on the nameplate. Setpoint is defined as the point the regulator starts to open. Build up above setpoint is required to achieve maximum capacity. To change the setpoint, loosen the locknut (key 17, Figure 4) or locking lever (key 22, Figure 4) and turn the adjusting screw (key 18, Figure 4) clockwise to increase the setpoint, or counterclockwise to decrease it. Monitor the inlet pressure with a test gauge during the adjustment. Tighten the locknut or locking lever to maintain the desired setting. Available set pressure ranges, recommended maximum allowable differential pressures and spring data are shown in Tables 2 and 3.

## Shutdown

Close the upstream shutoff valve. Close downstream shutoff valve. Open the applicable bleed valves to exhaust the system.

### Note

**When the pressure loaded option is used, bleed all pressure from the spring case before bleeding pressure under the diaphragm to avoid internal part damage.**

## Maintenance

**WARNING**

**Before disassembling the regulator, isolate it from the pressure system and release all pressure from the regulator as specified in the Shutdown section. Relieve all spring compression and isolate regulator from the pressurized system prior to removing the clamp (key 15).**

Due to normal wear that may occur, parts must be periodically inspected and replaced if necessary. The frequency of inspection depends on the severity of service conditions. A Preventative Maintenance schedule should be implemented that checks regulator set point and lockup and that evaluates regulator performance to the system requirements. Regulator performance outside the system requirements will require either adjustment, part maintenance or regulator replacement to meet system requirements.

This section includes instructions for disassembly and replacement of parts. All key numbers refer to Figure 4 or 5.

1. If damage to the diaphragm or seating surface is suspected, or to inspect other internal parts, loosen the locknut (key 17) or locking lever (key 22) and turn the adjusting screw (key 18) counterclockwise to remove all spring compression.
2. Loosen the sanitary clamp (key 15) to remove the spring case (key 14). Remove the upper spring seat (key 11) and the regulator spring (keys 12 and 13, when applicable).
3. Remove the diaphragm assembly and plug from the body (key 1). Inspect parts for damage.

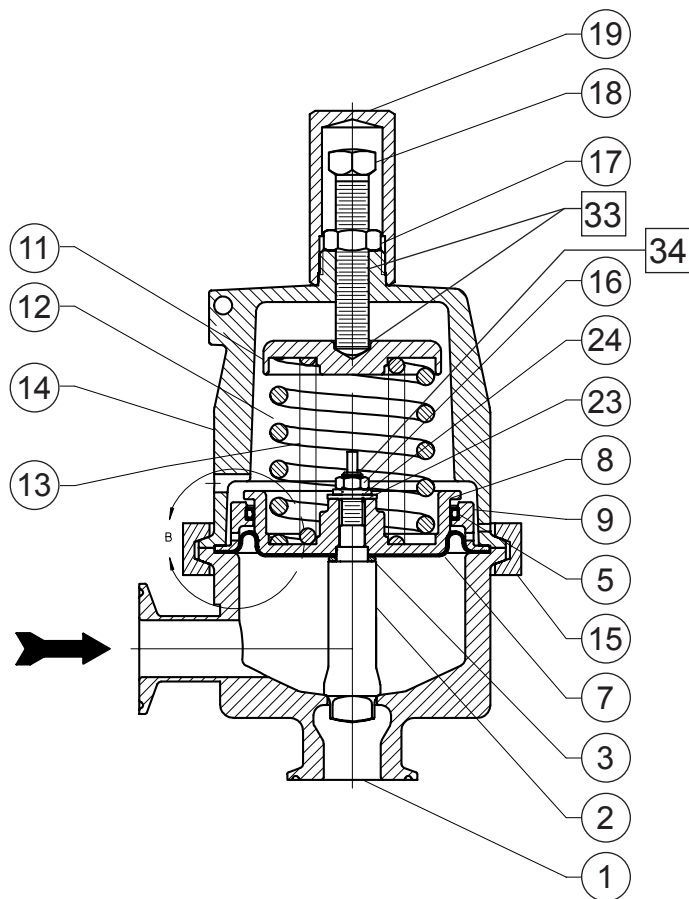
### Note

**When disassembling a unit with a metal diaphragm, replace both diaphragm gaskets (key 6) to ensure a good seal at the diaphragm flange.**

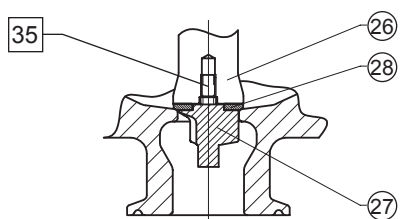
**Replace the piston ring (key 5), if it has been removed from the guide ring (key 9). Take care not to damage the piston ring during replacement.**

4. If parts require replacement, loosen the nut (key 16) while holding wrench flats on plug (key 3) and remove the lock washer (key 24) and flat washer (key 23). The lower spring seat (key 8), guide ring (key 9), diaphragm

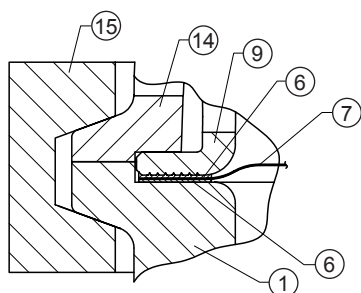
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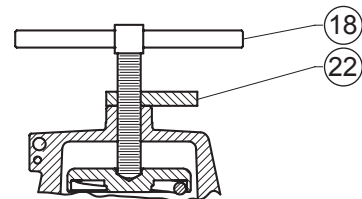
STANDARD BACKPRESSURE REGULATOR  
WITH ELASTOMERIC DIAPHRAGM



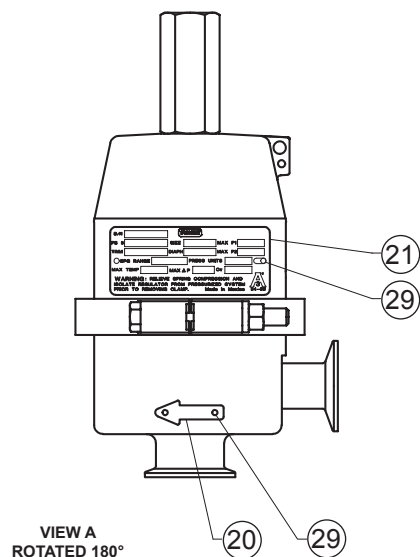
SOFT SEAT OPTION



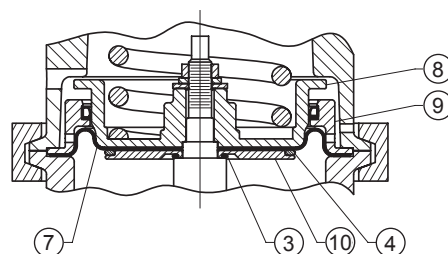
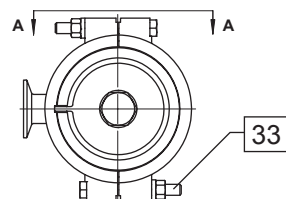
VIEW B – METAL DIAPHRAGM FOR STANDARD REGULATOR



T-HANDLE OPTION



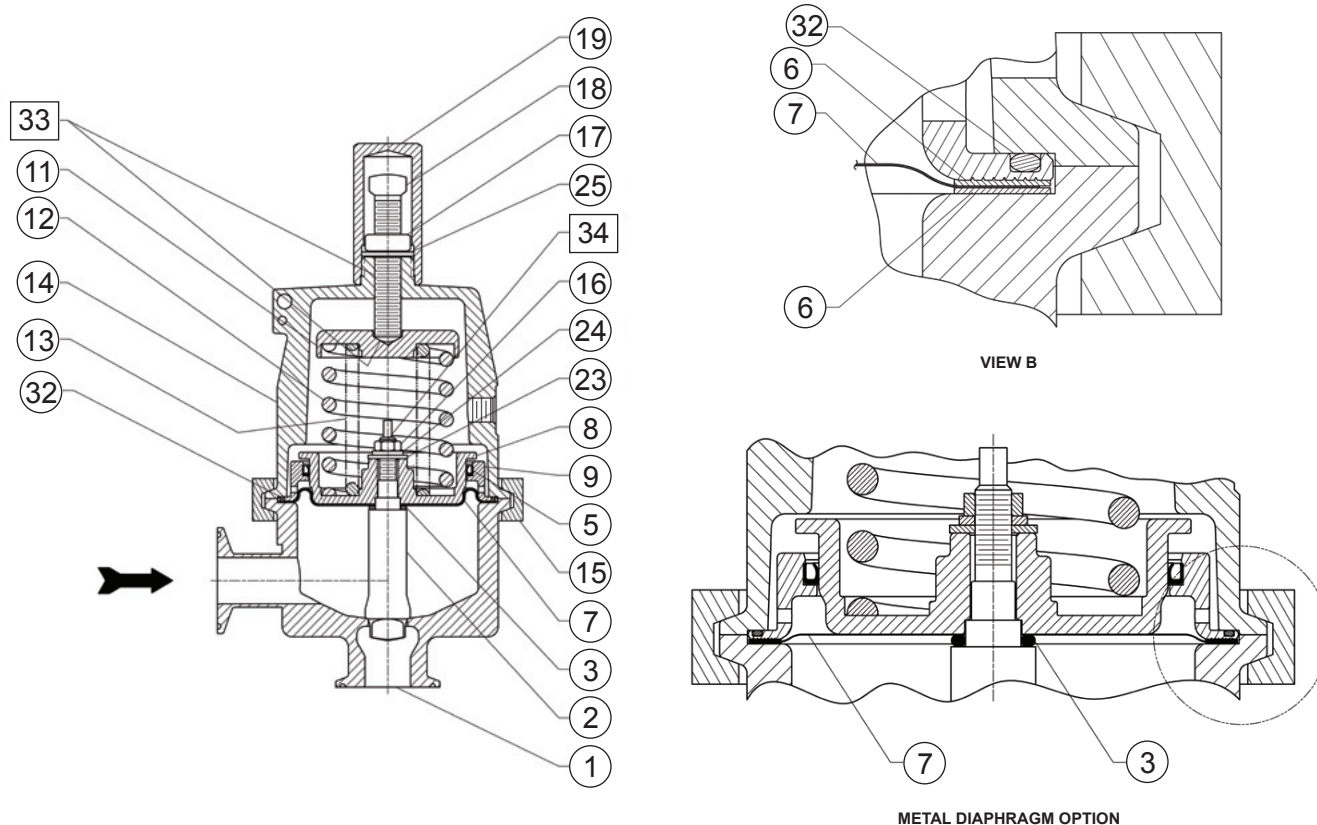
VIEW A  
ROTATED 180°



VACUUM PROTECTION OPTION

**Figure 4. Type SR8 Backpressure Sanitary Regulator Assembly Drawing**  
1/2 through 1-1/2-Inch Sizes (DN 15 through 40)





**Figure 5.** Type SR8 Sanitary Backpressure Regulator Assembly with Pressure Loaded Spring Case  
1/2 through 1-1/2-Inch Sizes (DN 15 through 40)

(key 7), and plug O-ring (key 3) can now be removed from the plug (key 2). An optional lower diaphragm plate (key 10) and O-ring (key 4) are included for the constructions offering protection against vacuum conditions.

5. Replace any damaged parts. Refer to the section titled Soft Seat Maintenance when the seat needs to be replaced.

6. Reassemble in the reverse order of the above procedure. The order is listed below or refer to Figure 3.

- a.) Plug (key 2)
- b.) Plug O-ring (key 3)
- c.) Diaphragm plate (key 10) (vacuum protection construction only)
- d.) Diaphragm plate O-ring (key 4) (vacuum protection construction only)
- e.) Diaphragm gasket (key 6) (Metal diaphragms only)
- f.) Diaphragm (key 7)
- g.) Diaphragm gasket (key 6) (Metal diaphragms only)
- h.) Guide ring assembly (keys 9 and 5)

- i.) Lower spring seat (key 8)
- j.) Flat Washer (key 23)
- k.) Lock Washer (key 24)
- l.) Hex Nut (key 16)

7. Hold wrench flats on plug (key 2), then torque hex nut (key 16) to 6 to 8 in•lbs (0,7 to 0,9 N•m) for the 1/2 and 3/4-inch (DN 15 and 20), 5 to 7 ft•lbs (7 to 9 N•m) for the 1 and 1-1/2 inch (DN 25 and 40) and 28 to 30 ft•lbs (38 to 41 N•m) for 2 and 3-inch (DN 50 and 80). After tightening the hex nut, apply Loctite 290 or equivalent to the nut/thread interface.

8. Position diaphragm assembly in body (key 1). Replace regulator spring (keys 12 and 13, when applicable) and upper spring seat (key 11). Replace the spring case (key 14) and sanitary clamp (key 15). Torque clamp nuts to 20 to 22 ft•lbs (27 to 30 N•m) for the 1/2 through 1-1/2-inch (DN 15 through 40) and 38 to 40 ft•lbs (52 to 54 N•m) for the 2 and 3-inch (DN 50 and 80).

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## Note

Lubricate the adjusting screw (key 18) threads and the sanitary clamp bolt threads (key 15) to reduce galling of stainless steel. Factory recommends Bostik Never Seez white food grade lubricant.

Keep even spacing between clamp halves when tightening clamp nuts. This will ensure even loading of the diaphragm. If clamp halves touch, please contact factory for a replacement clamp.

9. Follow Startup and Adjustment procedures.

## Soft Seat Maintenance

Take care not to damage the internal/wetted surface finish when performing Soft Seat Maintenance.

1. Disassemble the regulator as stated in the prior section.
2. To access soft seat (key 28), unscrew the lower plug (key 27) from the upper plug (key 26). If damaged, replace with new part. Apply Loctite 246 or equivalent to male thread before tightening. Proper torque for the assembly is 6 to 8 in•lbs (0,7 to 0,9 N•m) for the 1/2-inch and 3/4-inch (DN 15 and 20); 8 to 10 in•lbs (0,9 to 1,1 N•m) for the 1-inch and 1-1/2 x 1-inch (DN 25 and 40 x 25); and 5 to 7 ft•lbs (7 to 9 N•m) for the 1-1/2 inch (DN 40). Torque for 2 and 3-inch (DN 50 and 80) is 23 to 25 ft•lbs (31 to 34 N•m).
3. Reassemble as stated in the prior section.

## Parts Ordering

When corresponding with your Fisher sales office or sales representative about this equipment, always reference the equipment serial number and FS number that can be found on the nameplate.

When ordering replacement parts, reference the key number of each needed part as found in the following parts list. Separate kits containing all recommended spare parts are available.

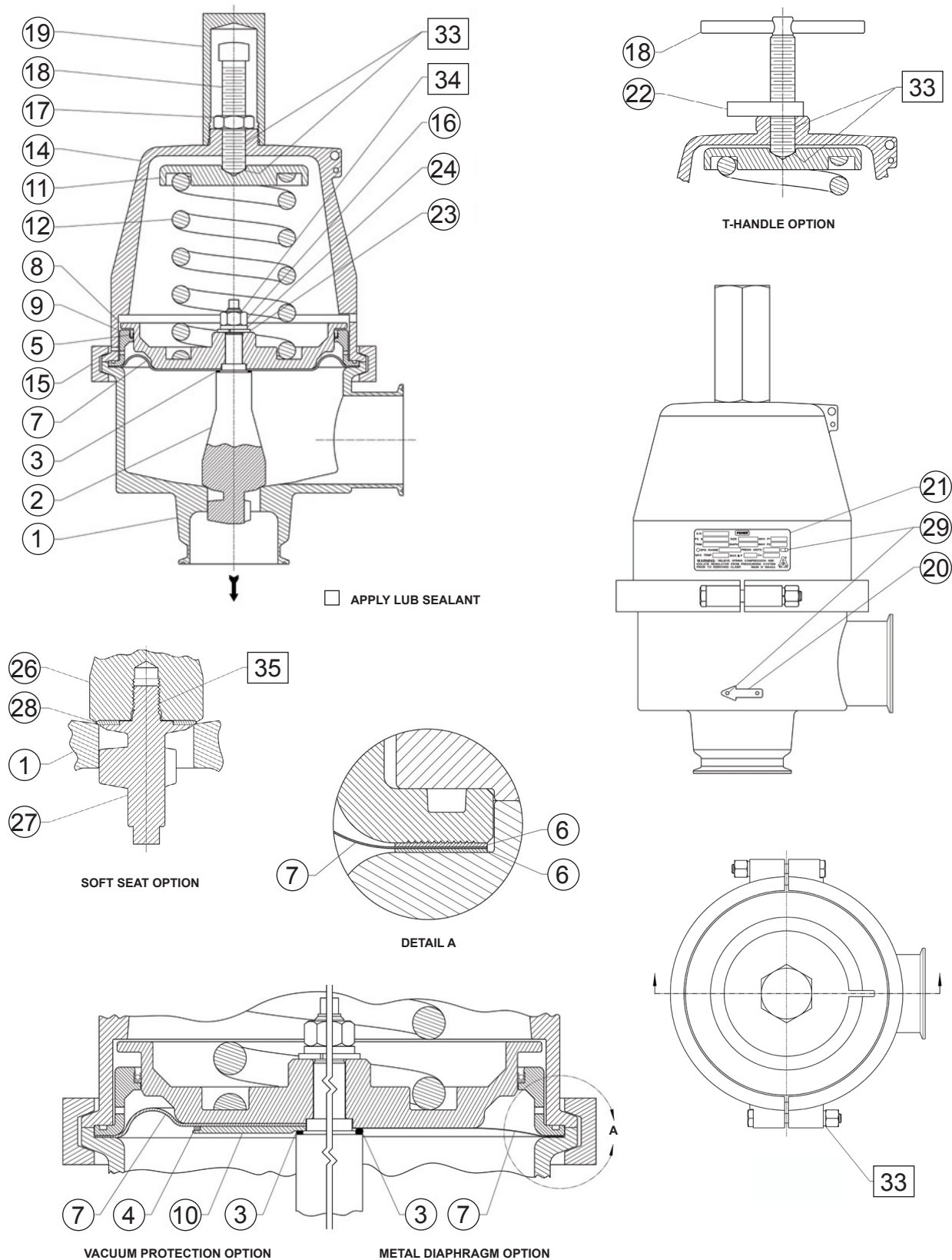
## Parts List

Key	Description	Part Number
Parts Kits		
Diaphragm Kits (includes keys 3, 5, and 7. Stainless steel kits include key 6, qty 2) Does not include all applicable parts for changing between elastomer and metal diaphragm constructions. See parts list for differences.		
	1/2 and 3/4-inch (DN 15 and 20) bodies	
	EPDM diaphragm and O-ring	RSR58X00E12
	316L SST Diaphragm and PTFE/FKM O-rings	RSR58X00S12
	PTFE/FKM Diaphragm and O-rings	RSR58X00V12
	1 and 1-1/2-inch (DN 25 and 40) bodies	
	EPDM diaphragm and O-rings	RSR58X00E22
	316L SST Diaphragm and PTFE/FKM O-rings	RSR58X00S22
	PTFE/FKM Diaphragm and O-rings	RSR58X00V22
	2 and 3-inch (DN 50 and 80) bodies	
	EPDM diaphragm and O-rings	RSR58X00E32
	316L SST Diaphragm and PTFE/FKM O-rings	RSR58X00S32
Soft Seat Kits (includes keys 26, 27, and 28)		
	1/2-Inch (DN 15) body	
	PTFE/316L SST	GE06788X012
	PEEK/316L SST	GE06788X022
	3/4-Inch (DN 20) body	
	PTFE/316L SST	GE06797X012
	PEEK/316L SST	GE06797X022
	1-Inch (DN 25) body	
	PTFE/316L SST	GE06323X012
	PEEK/316L SST	GE06323X022
	1-1/2-Inch (DN 40) body	
	PTFE/316L SST	GE06324X012
	PEEK/316L SST	GE06324X022
	2 and 3-Inch (DN 50 and 80) bodies	
	PTFE/316L SST	GE14009X012
	PEEK/316L SST	GE14009X022
1	Body	
	1/2-Inch (DN 15) body	GE07951X012
	3/4-Inch (DN 20) body	GE07952X012
	1-Inch (DN 25) body	GE07949X012
	1-1/2 Inch (DN 40) body	GE07950X012
	1-1/2 x 1-Inch (DN 40 x 25) body	GE07776X012
	2-Inch (DN 50) body	GE13988X012
	3-Inch (DN 80) body	GE13989X012
2	Plug (metal seat)	
	1/2-Inch (DN 15) body	GE06786X012
	3/4-Inch (DN 20) body	GE06795X012
	1-Inch and 1-1/2 x 1-Inch (DN 25 and 40 x 25) bodies	GE06039X012
	1-1/2 Inch (DN 40) body	GE06191X012
	2 and 3-Inch (DN 50 and 80) bodies	GE14007X012
3	Plug O-Ring	
	1/2 and 3/4-Inch (DN 15 and 20) bodies	
	Elastomer diaphragms	
	EPDM	1H2919X0022
	PTFE/FKM	1P8453X0042
	316L Stainless Steel diaphragms	
	PTFE	GE10788X012
	EPDM	14B1935X032
	1 and 1-1/2 Inch (DN 25 and 40) bodies	
	Elastomer diaphragms	
	EPDM	1D2888X0042
	PTFE/FKM	1C7822X0142
	316L Stainless Steel diaphragms	
	PTFE/FKM	16A6903X022
	EPDM	14A1968X042

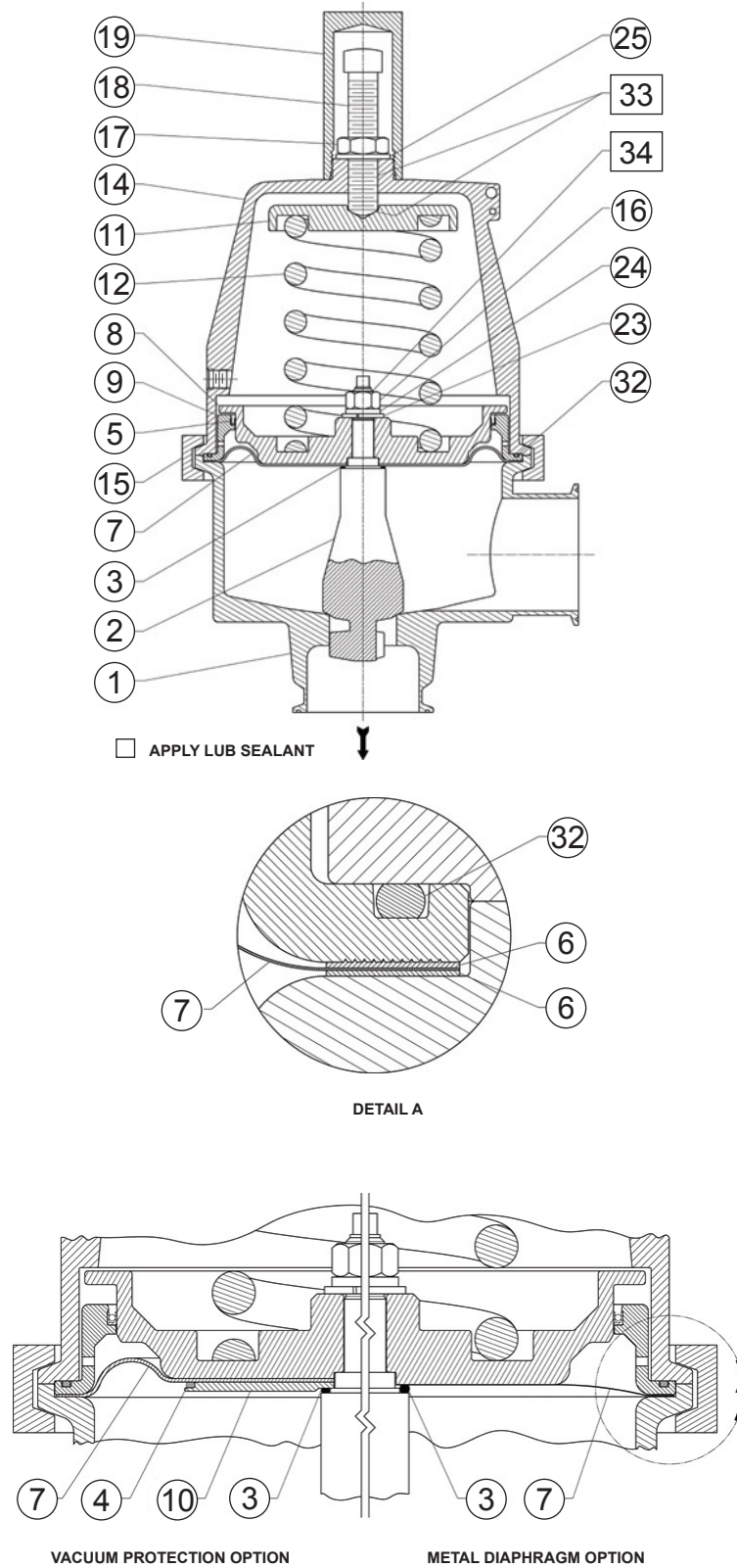


Key	Description	Part Number	Key	Description	Part Number
3	Plug O-Ring (continued) 2 and 3-Inch (DN 50 and 80) bodies Elastomer diaphragms		14	Spring Case 1/2 and 3/4-inch (DN 15 and 20) bodies	
	EPDM	1B8855X0112		CF8M	
	PTFE/FKM	12A0006X022		Standard	GE06767X012
	316L Stainless Steel diaphragms			Pressure Loaded	GE06768X012
	PTFE/FKM	12A0006X022		316 SST	
	EPDM	1B8855X0112		Standard	GE17730X012
				Pressure Loaded	GE14020X012
4	Diaphragm Plate O-Ring 1/2 and 3/4-inch (DN 15 and 20) bodies			1 and 1-1/2-inch (DN 25 and 40) bodies	
	EPDM	1W1932X0082		CF8M	
	PTFE/FKM	1W1932X0092		Standard	GE02641X012
	1 and 1-1/2-inch (DN 25 and 40) bodies			Pressure Loaded	GE06118X012
	EPDM	1V3234X0042		316 SST	
	PTFE/FKM	1V3234X0052		Standard	GE17755X012
	2 and 3-Inch (DN 50 and 80) bodies			Pressure Loaded	GE14021X012
	EPDM	1V3303X0082		2 and 3-inch (DN 50 and 80) bodies	
	PTFE/FKM	1V3303X0092		CF8M	
5	Piston Ring 1/2 and 3/4-Inch (DN 15 and 20) bodies	GE09274X012		Standard	GE13992X012
	1 and 1-1/2 Inch (DN 25 and 40) bodies	GE09273X012		Pressure Loaded	GE13991X012
	2 and 3-Inch (DN 50 and 80) bodies	GE14027X012		316 SST	
6	Diaphragm Gasket, for use with 316L Stainless steel diaphragm only, PTFE (2 required)			Standard	GE14018X012
	1/2 and 3/4-inch (DN 15 and 20) bodies	GE06772X012		Pressure Loaded	GE14019X012
	1 and 1-1/2-inch (DN 25 and 40) bodies	GE06076X012	15	Bolted Clamp 1/2 and 3/4-inch (DN 15 and 20) bodies	GE06769X012
	2 and 3-Inch (DN 50 and 80) bodies	GE13995X012		1 and 1-1/2-inch (DN 25 and 40) bodies	GE06116X012
7	Diaphragm 1/2 and 3/4-inch (DN 15 and 20) bodies			2 and 3-inch (DN 50 and 80) bodies	GE13993X012
	EPDM	GE06778X012	16	Hex Nut 1/2 and 3/4-inch (DN 15 and 20) bodies	10A1341X022
	316L SST	GE06777X012		1 and 1-1/2-inch (DN 25 and 40) bodies	1A309338992
	PTFE/FKM	GE06779X012		2 and 3-inch (DN 50 and 80) bodies	T1208735252
	1 and 1-1/2-inch (DN 25 and 40) bodies		17	Hex Nut 1/2 and 3/4-inch (DN 15 and 20) bodies	1A3465X0032
	EPDM	GE02299X012		1 and 1-1/2-inch (DN 25 and 40) bodies	T1208635252
	316L SST	GE02643X012		2 and 3-inch (DN 50 and 80) bodies	1A3511X0072
	PTFE/FKM	GE06086X012	18	Adjusting Screw 1/2 and 3/4-inch (DN 15 and 20) bodies	
	2 and 3-Inch (DN 50 and 80) bodies			Standard	GE08849X012
	EPDM	GE14001X012		T-Handle	GE08987X012
	316L SST	GE14000X012		1 and 1-1/2-inch (DN 25 and 40) bodies	
8	Lower Spring Seat 1/2 and 3/4-inch (DN 15 and 20) bodies			Standard	GE06080X012
	Without Vacuum Protection	GE06774X012		T-Handle	GE08985X012
	With Vacuum Protection	GE06775X012		2 and 3-inch (DN 50 and 80) bodies	
	1, 1-1/2, and 1-1/2 x 1-Inch (DN 25, 40, and 40 x 25) bodies			Standard	GE14024X012
	Without Vacuum Protection	GE06330X012		T-Handle	GE14025X012
	With Vacuum Protection	GE02638X012	19	Closing Cap 1/2, 3/4, 1 and 1-1/2-inch (DN 15, 20, 25 and 40) bodies	
	2 and 3-Inch (DN 50 and 80) bodies			316 SST	1E5433X0032
	Without Vacuum Protection	GE13997X012		Plastic	20B3082X012
	With Vacuum Protection	GE13998X012		2 and 3-inch (DN 50 and 80) bodies	GE14028X012
9	Guide Ring 1/2 and 3/4-inch (DN 15 and 20) bodies	GE06770X012	20	Flow Arrow	1V105938982
	1 and 1-1/2-inch (DN 25 and 40) bodies	GE02637X012	21	Nameplate	-----
	2 and 3-Inch (DN 50 and 80) bodies	GE13994X012	22	Locking Lever 1/2 and 3/4-inch (DN 15 and 20) bodies	GE08989X012
10	Diaphragm Plate 1/2 and 3/4-inch (DN 15 and 20) bodies	GE06776X012		1 and 1-1/2-inch (DN 25 and 40) bodies	GE08988X012
	1, 1-1/2, and 1-1/2 x 1-Inch (DN 25, 40, and 40 x 25) bodies	GE02642X012		2 and 3-inch (DN 50 and 80) bodies	GE14026X012
	2 and 3-Inch (DN 50 and 80) bodies	GE13999X012	23	Flat Washer 1/2 and 3/4-inch (DN 15 and 20) bodies	1C3329X0022
11	Upper Spring Seat 1/2 and 3/4-inch (DN 15 and 20) bodies	GE06773X012		1 and 1-1/2-inch (DN 25 and 40) bodies	GC060805X22
	1, 1-1/2 and 1-1/2 x 1-Inch (DN 25, 40 and 40 x 25) bodies	GE02639X012		2 and 3-inch (DN 50 and 80) bodies	1A5189X0022
	2 and 3-inch (DN 50 and 80) bodies	GE13996X012	24	Lock Washer 1/2 and 3/4-inch (DN 15 and 20) bodies	1H3395X0012
12	Spring	See Table 2		1 and 1-1/2-inch (DN 25 and 40) bodies	1C2257K0012
13	Spring 1/2 and 3/4-inch (DN 15 and 20) bodies	GE06784X012		2 and 3-inch (DN 50 and 80) bodies	1A639638992
	1, 1-1/2, and 1-1/2 x 1-Inch (DN 25, 40, and 40 x 25) bodies	GE06090X012	25	Sealing Washer 1/2 and 3/4-inch (DN 15 and 20) bodies	12A3880X022
				1 and 1-1/2-inch (DN 25 and 40) bodies	GE20712X012
				2 and 3-inch (DN 50 and 80) bodies	1V4246X0022

# Type SR8



**Figure 6. Type SR8 Backpressure Sanitary Regulator Assembly Drawing  
2 and 3-Inch Sizes (DN 50 and 80)**



**Figure 7.** Type SR8 Sanitary Backpressure Regulator Assembly with Pressure Loaded Spring Case  
2 and 3-Inch Sizes (DN 50 and 80)

# Type SR8

Key	Description	Part Number	Key	Description	Part Number
26	Upper Plug		28	Soft Seat (continued)	
	1/2-Inch (DN 15) body	GE06792X012		1 and 1-1/2 x 1-Inch (DN 25 and 40 x 25) bodies	
	3/4-Inch (DN 20) body	GE06801X012		PTFE	GE06197X012
	1 and 1-1/2 x 1-Inch (DN 25 and 40 x 25) bodies	GE06325X012		PEEK	GE06197X022
	1-1/2 Inch (DN 40) body	GE06326X012		1-1/2 Inch (DN 40) body	
	2 and 3-inch (DN 50 and 80) bodies	GE14013X012		PTFE	GE06200X012
27	Lower Plug			PEEK	GE06200X022
	1/2-Inch (DN 15) body	GE06793X012		2 and 3-inch (DN 50 and 80) bodies	
	3/4-Inch (DN 20) body	GE06802X012		PTFE	GE14010X012
	1 and 1-1/2 x 1-Inch (DN 25 and 40 x 25) bodies	GE06327X012		PEEK	GE14010X022
	1-1/2 Inch (DN 40) body	GE06328X012	29	Drive Screw (2 required)	1E953028982
	2 and 3-inch (DN 50 and 80) bodies	GE14014X012	32	Guide Ring Seal	
28	Soft Seat			1/2 and 3/4-Inch (DN 15 and 20) bodies	GE18400X012
	1/2-Inch (DN 15) body			1 and 1-1/2 Inch (DN 25 and 40) bodies	GE18399X012
	PTFE	GE06789X012		2 and 3-inch (DN 50 and 80) bodies	GE11039X012
	PEEK	GE06789X022	33	Bostik Never Seez Food Grade	
	3/4-Inch (DN 20) body			(white) or equivalent	-----
	PTFE	GE06798X012	34	Loctite 290 or equivalent	-----
	PEEK	GE06798X022	35	Loctite 246 or equivalent	-----

## Industrial

USA - Headquarters  
McKinney, Texas 75070 USA  
Tel: 1-800-558-5856  
Outside U.S. 1-469-293-4201

Asia-Pacific  
Shanghai, China 201206  
Tel: 86-21-5899 7887

Europe  
Bologna, Italy 40013  
Tel: 39 051 4190611

## Natural Gas Technologies

USA - Headquarters  
McKinney, Texas 75070  
Tel: 1-800-558-5856  
Outside U.S. 1-469-293-4201

Asia-Pacific  
Singapore, Singapore 128461  
Tel: +65 6777 8211

Europe  
Bologna, Italy 40013  
Tel: 39 051 4190611  
Gallardon, France 28320  
Tel: +33 (0)2 37 33 47 00

## Industrial/High Purity

TESCOM  
Elk River, Minnesota 55330 USA  
Tel: 1-763-241-3238  
Selmsdorf, Germany 23923  
Tel: +49 (0) 38823 31 0

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